

Holomorphic functions associated with indeterminate rational moment problems

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July 12, 2013

Abstract

We consider indeterminate rational moment problems on the real line with their associated orthogonal rational functions. There exists a Nevanlinna type parameterization relating to the problem, with associated Nevanlinna matrices of functions having singularities in the closure of the set of poles of the rational functions belonging to the problem. We prove that the growth at the isolated singularities of the four functions in the Nevanlinna matrix is the same.

Keywords: rational moment problems, orthogonal rational functions, Nevanlinna parameterization, Riesz type criterion, growth estimates

MSC: 30D15, 30E05, 42C05, 44A60

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